

U.S. Application No. 10/018,964
Confirmation No. 6025
Amendment dated January 18, 2006

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently Amended) An isolated peptide comprising:
~~Tyr-Ser-Gly-Pro-Pro-Xaa₁-Xaa₂-Xaa₃-Arg Arg-Xaa₄-Asn-Xaa₅-Tyr-Xaa₆ (SEQ ID NO: 1)~~
wherein Xaa₁=Cys or Ser; Xaa₂=Ser or Gly; Xaa₃=Ser, Ala or Pro; Xaa₄=Arg or Gln; Xaa₅=Ser, Cys or Gly; and Xaa₆=Asp or Glu Tyr-Ser-Gly-Pro-Pro-Ser-Gly-Ala-Arg-Arg-Arg-Asn-Cys-Tyr-Glu (SEQ ID NO:1):
wherein the isolated peptide does not include a basic helix-loop-helix (bHLH) domain;
wherein the isolated peptide binds cyclin dependent kinase 4.
2. (Cancelled)
3. (Currently Amended) A fusion protein comprising:
 - (a) a peptide comprising ~~Tyr-Ser-Gly-Pro-Pro-Xaa₁-Xaa₂-Xaa₃-Arg Arg-Xaa₄-Asn-Xaa₅-Tyr-Xaa₆ (SEQ ID NO: 1)~~, wherein Xaa₁=Cys or Ser; Xaa₂=Ser or Gly; Xaa₃=Ser, Ala or Pro; Xaa₄=Arg or Gln; Xaa₅=Ser, Cys or Gly; and Xaa₆=Asp or Glu Tyr-Ser-Gly-Pro-Pro-Ser-Gly-Ala-Arg-Arg-Asn-Cys-Tyr-Glu (SEQ ID NO:1), wherein the peptide binds cyclin dependent kinase 4; and
 - (b) a heterologous amino acid sequence.
4. (Original) The fusion protein of claim 3 wherein the heterologous amino acid sequence comprises a nuclear localization signal.
5. (Previously Presented) The fusion protein of claim 4 wherein the peptide is at the C-terminus of the fusion protein.
- 6-7. (Cancelled)

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8. (Withdrawn and Currently Amended) A method of inhibiting cell growth, comprising:
administering to a patient a CDK4 binding peptide comprising:

~~Tyr-Ser-Gly-Pro-Pro-Xaa₁-Xaa₂-Xaa₃-Arg-Arg-Xaa₄-Asn-Xaa₅-Tyr-Xaa₆~~
wherein Xaa₁=Cys or Ser; Xaa₂=Ser or Gly; Xaa₃=Ser, Ala or Pro; Xaa₄=Arg or Gln; Xaa₅=
Ser, Cys or Gly; and Xaa₆=Asp or Glu Tyr-Ser-Gly-Pro-Ser-Gly-Ala-Arg-Arg-Asn-Cys-Tyr-Glu
(SEQ ID NO:1), wherein the peptide does not include a basic helix-loop-helix domain in an
amount effective to inhibit cell growth.

9. (Withdrawn and Currently Amended) A method of inhibiting the activity of CDK4
comprising:

contacting CDK4 with a CDK4 binding peptide comprising:

~~Tyr-Ser-Gly-Pro-Pro-Xaa₁-Xaa₂-Xaa₃-Arg-Arg-Xaa₄-Asn-Xaa₅-Tyr-Xaa₆~~
wherein Xaa₁=Cys or Ser; Xaa₂=Ser or Gly; Xaa₃=Ser, Ala or Pro; Xaa₄=Arg or Gln; Xaa₅=
Ser, Cys or Gly; and Xaa₆=Asp or Glu Tyr-Ser-Gly-Pro-Ser-Gly-Ala-Arg-Arg-Asn-Cys-Tyr-Glu
(SEQ ID NO:1), wherein the peptide does not include a basic helix-loop-helix domain in an
amount effective to inhibit the activity of CDK4.

10-11. Cancelled.